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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,007	09/09/2002	Allan Roy Gale	201-1162	3752
22844	7590	12/17/2003	EXAMINER	
FORD GLOBAL TECHNOLOGIES, LLC. SUITE 600 - PARKLANE TOWERS EAST ONE PARKLANE BLVD. DEARBORN, MI 48126			MCCLLOUD, RENATA D	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,007	Applicant(s) GALE ET AL.	
	Examiner Renata McCloud	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 11, 12, 14, 15, 21, 22, 25, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 2-5, 8-10, 13, 16-20, 23, 24 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 09/09/2002 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 14, 15, 29 and 30 are rejected under 35 U.S.C. 102(a) as being anticipated by Desrus (U.S. 5,525,881).

Claims 1 and 14: Desrus teaches a method and apparatus for thermal control of an electric motor in a vehicle (Col. 1: 13-16) comprising a computer readable storage device (Fig. 9: 70) a controller (Fig. 15: 201); determining a maximum energy amount that can be put into a motor before the temperature of the motor rises to a maximum temperature (Col. 5: 25-33); determining a motor power assist value that the motor can provide (Col. 13: 5-7) in a predetermined time period (Col. 13: 39-43) before the motor reaches the maximum temperature (Col. 13: 1-7, 15-50); and means for outputting the power assist value to the controller (Fig. 15: 203; Col. 13: 5-15).

Claim 15: outputting a motor power assist value to a controller (Fig. 15: 203; Col. 13: 5-15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrus as applied to claims 1 and 14 above, and further in view of Severinsky (U.S. 5,343,970).

Claims 6 and 21: Desrus teaches the limitations of claims 1 and 14. Referring to claims 6 and 21, Desrus teaches inputting ambient air temperature (Col. 2:16-21) and motor temperature (Col. 2: 50). Desrus does not teach inputting motor speed into the system. Severinsky teaches inputting motor speed into a controller (Fig. 3:DATA INPUT; Col. 10: 14-20). It would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the apparatus taught by Desrus to input motor speed as taught by Severinsky. The advantage of this would be improved fuel efficiency due to improved torque control.

5. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrus and Severinsky as applied to claim 7 above, and further in view of McCarty.

Claims 7 and 22: Desrus and Severinsky teach the limitations of claims 6 and 21. Referring to claims 7 and 22, they do not teach measuring a stator copper temperature. McCarty teaches measuring a motor stator copper temperature (Col. 3:52-

60). It would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the apparatus taught by Desrus and Severinsky to measure a copper temperature as taught by McCarty. The advantage of this would be improved heat transfer feedback.

6. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrus as applied to claims 1 and 14 above, and further in view of Drozdz et al (U.S. 5,898,282).

Claims 12 and 25: Desrus teach the limitations of claims 1 and 14. Referring to claims 12 and 25, Desrus does not teach using a look-up table. Drozdz et al teach using a look-up table (Col. 6: 40-45). It would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the apparatus taught by Desrus to use a look-up table as taught by Drozdz. The advantage of this would be the ability to control the motor's power output.

Allowable Subject Matter

7. Claims 2-5,8-10, 13 16-20,23,24,26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De Filippis et al (U.S. 6,426,601), Yamada et al (U.S. 5,988,307), and Katagiri et al (U.S. 6,580,188).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (703) 308-1763. The examiner can normally be reached on Mon.- Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703) 308-3370. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Renata McCloud
Examiner
Art Unit 2837

RDM


ROBERT NAPPI
SUPERVISORY PATENT EXAMINER